

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of the claims in the application:

What is claimed is:

Claim 1. (Currently Amended) Steel for the production of high-strength components with excellent low-temperature toughness, having the following composition (in % by weight):

C: [[0.08]]0.16 to 0.25 %,

Si: 0.10 to 0.30 %,

Mn: 0.80 to 1.60 %,

P: ≤ 0.020 %,

S: ≤ 0.015 %,

a sum of the P and S content being ≤ 0.030 %,

Cr: 0.40 to 0.80 %,

Mo: 0.30 to 0.50 %,

Ni: 0.70 to 1.20 %,

Al: 0.020 to 0.060 %,

N: 0.007 to 0.018 %,

Nb: 0.02 to 0.07 %,

the remainder being iron and inevitable impurities.

Claim 2. (Previously Presented) Steel according to Claim 1, wherein its C content is from 0.16 % by weight to 0.23 % by weight.

Claim 3. (Previously Presented) Steel according to Claim 1 wherein its Mn content is from 1.00 % by weight to 1.35 % by weight.

Claim 4. (Previously Presented) Steel according to Claim 1 wherein its Cr content is from 0.40 % by weight to 0.65 % by weight.

Claim 5. (Previously Presented) Steel according to Claim 1 wherein its Mo content is from 0.35 % by weight to 0.50 % by weight.

Claim 6. (Previously Presented) Steel according to Claim 1 wherein its Ni content is from 0.75 % by weight to 1.00 % by weight.

Claim 7. (Previously Presented) Steel according to Claim 1 wherein its Al content is from 0.020 % by weight to 0.045 % by weight.

Claim 8. (Previously Presented) Steel according to Claim 1 wherein its N content is from 0.007 % by weight to 0.015 % by weight.

Claim 9. (Previously Presented) Steel according to Claim 1 wherein it has an austenite grain size that is finer than ASTM 10.

Claim 10. (Previously Presented) Use of a steel composed according to Claim 1 for the production of high-strength components by cold forming with subsequent temper-hardening.

Claim 11. (Previously Presented) Use according to Claim 10, wherein the components are used for carrying, pulling, lifting, conveying or securing of loads.

Claim 12. (Previously Presented) Use according to Claim 10, wherein the components are used for connection of structural elements.

Claim 13. (Previously Presented) Use according to Claim 10, wherein the components are chains.

Claim 14. (Previously Presented) Use according to Claim 13, wherein the chains are round steel chains.

Claim 15. (Previously Presented) Use according to Claim 13, wherein the chains are welded.

Claim 16. (Previously Presented) Use according to Claim 10, wherein the components have a tensile strength of at least 1,200 MPa.

Claim 17. (Previously Presented) Use according to Claim 16, wherein the tensile strength is at least 1,550 MPa.

Claim 18. (Previously Presented) Use according to Claim 16, wherein the tensile strength is at least 1,600 MPa.

Claim 19. (Previously Presented) Use according to Claim 10, wherein at a tensile strength of at least 1,550 MPa, a fracture appearance transition temperature FATT of the components is at most –60 °C.

Claim 20. (Previously Presented) Use according to Claim 10, wherein a notch impact working value is more than 45 J.

Claim 21. (Previously Presented) Use according to Claim 10, wherein a material of the component has a technical crack initiation toughness J_{IC} of more than 170 N/mm².

Claim 22. (Previously Presented) Use according to Claim 21, wherein the technical crack initiation toughness J_{IC} is more than 185 N/mm².

Claim 23. (Previously Presented) Use according to Claim 10, wherein the components exhibit an elongation at break of more than 28%.